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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,471	09/21/2001	Kimihiko Nishioka	P 283651 OL97501N-US	4064
909	7590	07/07/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			LESTER, EVELYN A	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	

2873

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/957,471

Applicant(s)

NISHIOKA ET AL.

Examiner

Evelyn A. Lester

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 7-20 and 27-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5, 6, 21-26, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3-2-05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. The Applicant should note that claim 6 was inadvertently left out of Species II, and will subsequently be included with the Applicant's election of Species II.

2. Applicant's election with traverse of Species II in the reply filed on 4-27-05 is acknowledged. The traversal is on the ground(s) that there is no serious burden on the Examiner and that the election requirement is not proper. This is not found persuasive because of the following reasons.

With respect to the Applicant's argument that there is not a serious burden on the Examiner, is not well met. The classification of the claimed inventions do not depict the extensive search required for each of the inventions. The collective scope of all the claimed inventions is extensive. It is noted that there are 206 examples of optical apparatuses depicted and/or described in the Applicant's specification (i.e. 90 pages of specification and 53 Figures), which the scope of the claims collectively cover. Therefore, there is a serious burden on the Examiner for examining /prosecution of the entire application, should the election of species not be required.

Further, with respect to the election of species not being proper, this also is not well met. The Examiner does not agree with this argument because, though it is true that "[c]laims are never species," (MPEP 806.04(e)), the Applicant's determination that the claims have been used to define the species in the given election is incorrect. The

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species are defined in the descriptions given in the election requirement. The listing of claims does not define the species. As explained in the third paragraph, beginning at the bottom of page 2 and ending at the top of page 3, of the office action mailed on 3-8-05, the listing of claims was provided for the benefit of the Applicant, should any confusing arise from the election requirement. It has been the experience of the Examiner, that by providing a listing of claims, it has reduced and/or alleviated any confusion. The Applicant was invited to provide their own listing of claims, for the elected species, if they so desired. They chose not to provide an alternative listing. Therefore, the claims do not define the species. The descriptions of each species provide their definition. The Applicant is respectfully directed to the MPEP 806.04(f), which discusses "mutually exclusive details." Each of the described/defined species of the present application contain mutually exclusively details, as described.

Therefore, in view of the serious burden, as well as the above explanation, the election of species requirement is still deemed proper and is therefore made FINAL.

3. Claims 1-4, 7-20 and 27-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4-27-05.

***Claim Objections***

4. Claims 5 and 6 are objected to because of the following informalities: Claims 5 recites a power source and a driving circuit for driving, and also recites a “booster member” for creating a voltage necessary for driving. It is unclear what the Applicant intends with this claim language, and trying to read the extensive specification provided virtually no insight. It is respectfully requested that the Applicant assist the Examiner in fully understanding the claimed invention by providing, for example, appropriate citations from the specification, which support claim 5. If this cannot be resolved, a rejection under 35 USC 112, second paragraph may be necessary. Appropriate correction or explanation is required.

5. Claim 39 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 39, dependent on claim 26, recites an imaging system comprising an imaging optical system including a variable optical characteristic optical element recited in claim 26. However, claim 26 is directed to a cellular phone, comprising an image pickup device and an imaging optical system including a variable optical characteristic optical element used for autofocus. It is unclear how claim 39 further limits the subject matter of the previous claim, claim 26. As currently written, claim 39 makes little sense. Is it possible this claim was meant to be dependent on a different claim?

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 5 and 6, as far as these claims are understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hochstrate (4,238,793).

Hochstrate discloses the claimed invention of a variable optical characteristic optical element (10) comprising a power source (23) and a drive circuit (including “booster member” 32; 25,27,9, for example), wherein piezoelectric effect is used (note col. 6, lines 1-6). Please note Figure 6, and its accompanying text, for example.

7. Claims 21-26 and 38-39 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schachar (5,774,274).

Schachar disclose the claimed invention of a variable optical characteristic optical element having a deformable optical surface (Figure 9, element 402 (i.e. lens), which has two surfaces which a deformable, col. 9, lines 1-25), and the claimed invention further comprises a control system (equatorial ring of piezoelectric material

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with electric voltage applied) for driving the variable optical characteristic optical element. The control system includes a "booster member" in element 406, i.e. solenoids, for creating a voltage necessary for driving. The lens is a varifocal lens element using a fluid. Please note for example Figure 9, and its accompanying text.

With respect to claims 24-26 and 38-39, these claims contain recitation with respect to the manner the claimed invention is intended to be employed, which does not differentiate the claimed invention from the prior art apparatus, when the prior art invention teaches all the structural limitations of the claim. (MPEP 2114). In the instant case, the variable optical characteristic optical element is used for imaging optical systems.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following are U.S. Patents directed to various configurations of variable optical characteristic optical elements:

Sziklai	U.S. Patent 2,632,045
Benton	U.S. Patent 3,121,169
Kanagawa et al	U.S. Patent 5,712,692
Quaglia	U.S. Patent 5,739,959
Maguire, Jr.	U.S. Patent 5,748,382
Kanecko et al	U.S. Patent 5,917,657
Schachar	U.S. Patent 6,038,080
Widl	U.S. Patent 6,081,388
Kalt	U.S. Patent 6,317,108
Takeda et al	U.S. Patent 6,438,282 B1
Kalt	U.S. Patent 6,771,237 B1
Miles	U.S. Patent Pub. 2003/0072070 A1
East	U.S. Patent Pub. 2004/0000843 A1

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn A. Lester whose telephone number is (571) 272-2332. The examiner can normally be reached on M- F, from about 10 am to 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Evelyn A. Lester  
Primary Examiner  
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